

## REMARKS

This is in response to the official communication dated March 29, 2006. In the official communication, the Examiner required identification of the SEQ ID NOs. for the amino acid sequences shown in Figures 3, 4 and 11. The Examiner also required that the names of all the inventors be included in the Sequence Listing.

In response, Applicants have submitted substitute Figures 4 and 11, which now include the required SEQ ID NOs. The substitute Figure 4 submitted herewith is a total of four (4) pages, and substitute Figure 11 is a total of one (1) page. Although not required by the Examiner, Applicants have also submitted substitute Figure 1, which is a total of one (1) page, to include the required SEQ ID NOs. Applicants respectfully request that substitute Figures 1, 4 and 11, submitted herewith, replace the originally submitted Figures 1, 4 and 11.

Substitute Figure 1 depicts the nucleotide sequence of the J<sup>int</sup>J-C $\beta$ 2 mRNA transcript of the stromal/mesenchymal cell line [SEQ ID NO:38], MBA-13, and the deduced amino acid sequence encoded thereby [SEQ ID NO:39] (page 11, specification). Substitute Figure 1 contains no new matter.

Substitute Figure 4 depicts the SEQ IDs for the sequences shown for all possible versions of mouse TCR $\alpha\beta$  containing an intronic 5' end including an in-frame Met codon as collected from available data bases, as specifically described on page 12 of the specification. Substitute Figure 4 contains no new matter.

Substitute Figure 11 depicts human TCR J $\beta$ 2.3-C $\beta$  transcript cloned from cDNA of cord blood mononuclear cells and amniotic fluid cells, as specifically described on page 13 of the specification. The protein product (SEQ ID NO:51) is shown below the nucleotide sequence (SEQ ID NO:67). Substitute Figure 11 contains no new matter.

With regard to Figure 3, Applicants respectfully submit that Figure 3 shows reverse transcription (RT)-PCR products, but that Figure 3 does *not* show a sequence that can be identified by a SEQ ID Number. Specifically, as described on pages 11 and 12 of the specification, Figure 3 shows RT-PCR analysis of TCRC $\beta$ 2 cDNA including an in-frame intronic J sequence designated J<sup>int</sup>J-C $\beta$ 2, obtained from MBA-13 mesenchymal cell line and fetal primary cell cultures. The cDNA was obtained from total RNA

extracted from mouse embryonic fibroblast and different MBA-13 cell strains. The RT-PCR was performed using the following sense pairs:

exonic J $\beta$ 2.6: 5'-CTATGAACAGTACTTCGGTC-3' [SEQ ID NO:69]; or

intronic J $\beta$ 2.6: 5'-ATGGGAGAATACCTCGCTG-3' [SEQ ID NO:70]; or

5-CCCTAAATGGGAGAATACC [SEQ ID NO:71]; and

antisense primer C $\beta$ 3: 5'-CATCCTATCATCAGGGGGTTCTGTCTGCAA-3'. [SEQ ID NO:72]. Products of 465 bp and 524 bp were produced, respectively (see page 11, line 26, through page 12, line 4 of the specification).

The RT-PCR products shown in Figure 3 were thus obtained by performing RT-PCR using the primers identified by SEQ ID NOs:69-71 and SEQ ID NO:72. Applicants have amended the specification, with regard to the description of Figure 3, to recite the SEQ ID Nos for the primers identified by SEQ ID NOs:69-71 and SEQ ID NO:72. SEQ ID NOs:69-71 and SEQ ID NO:72 were disclosed in the original Sequence Listing filed with the application. No new matter is added by this amendment and entry thereof is respectfully requested.

In a telephone conference with the Examiner on May 3, 2006, Applicants discussed with the Examiner this amendment to the specification, and that this amendment -- which specifically recites the SEQ ID Nos for the primers identified by SEQ ID NOs:69-71 and SEQ ID NO:72 -- should address the sequence compliance issue for Figure 3. The Examiner stated that this amendment would be reviewed to ensure that it fully addressed the reasons for the notice to comply for Figure 3. In view of the amendment to the specification, Applicants respectfully submit that it is neither necessary nor proper to show a SEQ ID Number for Figure 3. Figure 3 shows RT-PCR analysis of TCRC $\beta$ 2 cDNA, but does not show the actual primers used for the RT-PCR.

In addition, Applicants respectfully note that the official communication dated March 29, 2006 states that "Figures 3, 4 and 11 do not show *amino acid sequences* with SEQ ID NO's, therefore in non-compliance." (emphasis added) Applicants respectfully submit, however, that Figure 3 shows reverse transcription (RT)-PCR analysis of TCRC $\beta$ 2 cDNA, which is an *RT-PCR product*. Figure 3 does not, however, show an *amino acid* sequence. Applicants therefore respectfully submit that it is improper to require identification of a SEQ ID Number for Figure 3 for an amino acid sequence when no amino acid sequence is shown in Figure 3.

In further response to the official communication dated March 29, 2006,  
Applicants have separately submitted substitute copies of the Sequence Listing in paper  
and computer readable form (CRF) pursuant to 37 C.F.R. §§1.821-1.825. The substitute  
copy of the Sequence Listing in paper form should be entered into the specification to  
replace the original-filed paper copy of the Sequence Listing.

Date: 5/3/2006

Respectfully submitted,



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